



PATENT  
Attorney Docket No.: 53529-5005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of:

Karl NOCKA *et al.*

Application No.: 10/005,907

Filed: December 7, 2001

For: NOVEL GENES ASSOCIATED WITH  
ALLERGIC HYPERSENSITIVITY AND  
MAST CELL ACTIVATION

Group Art Unit: 1644

Examiner: P. Huynh, Ph.D.

Commissioner for Patents  
U.S. Patent and Trademark Office  
220 20th Street S.  
Customer Window  
Crystal Plaza Two, Lobby, Room 1B03  
Arlington, VA 22202

Sir:

DECLARATION UNDER 37 C.F.R. § 1.131

We, Karl Nocka, Gregory Pirozzi, and Richard Einstein, declare as follows:

1. We are the named co-inventors of the above-referenced U.S. Patent Application (10/005,907).
2. The cited reference disclosing clone BF242113 became publicly available on November 16, 2000, as shown by the date on the reference. However, the Office Action indicates that the reference was dated November 14, 2000.
3. The Office Action states that Clone BF242113 comprises SEQ ID NO: 1 of the above-referenced application and anticipates claims 3 and 5 of the above-referenced application.

Attorney Docket No. 053529-5005  
Application No. 10/005,907  
Page 2

4. The MC1 clone (AA447527) comprising SEQ ID NO: 1 of the above-referenced application is the subject matter of pending claims 1-5, 23-29, and 49. The MC1 clone and BF242113 clone are the same clone since they comprise the same sequence.

5. The attached documents of Exhibit A discloses isolation of the MC1 clone. As shown in Exhibit A, we isolated the MC1 clone in the United States before November 14, 2000. Accordingly the subject matter of pending claims 1-5, 23-29, and 49 was invented prior to the publication of the cited reference.

6. I further declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

Respectfully submitted,

Date: 9/3/04

By: Karl Nocka  
Karl Nocka

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Gregorio Pirozzi

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Richard Einstein



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Respectfully submitted,

Date: \_\_\_\_\_ By: \_\_\_\_\_  
Karl Nocka

Date: \_\_\_\_\_ By: \_\_\_\_\_  
Gregorio Pirozzi

Date: 23 September, 2004 By: Richard Einstein  
Richard Einstein



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Respectfully submitted,

Date: \_\_\_\_\_

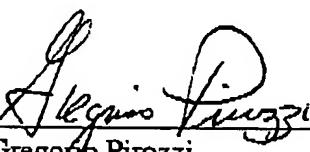
By: \_\_\_\_\_

Karl Nocka

Date: 10/14/04

By: \_\_\_\_\_

Gregorio Pirozzi

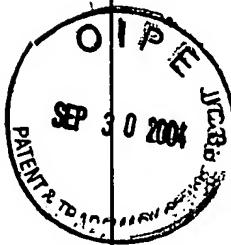


Date: \_\_\_\_\_

By: \_\_\_\_\_

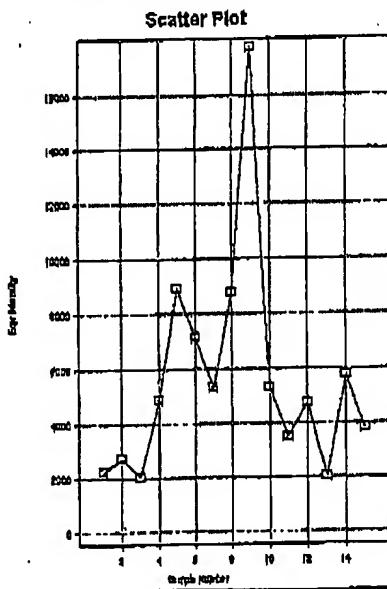
Richard Einstein

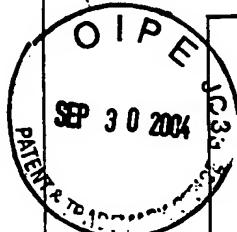
## Isolation of AA447527



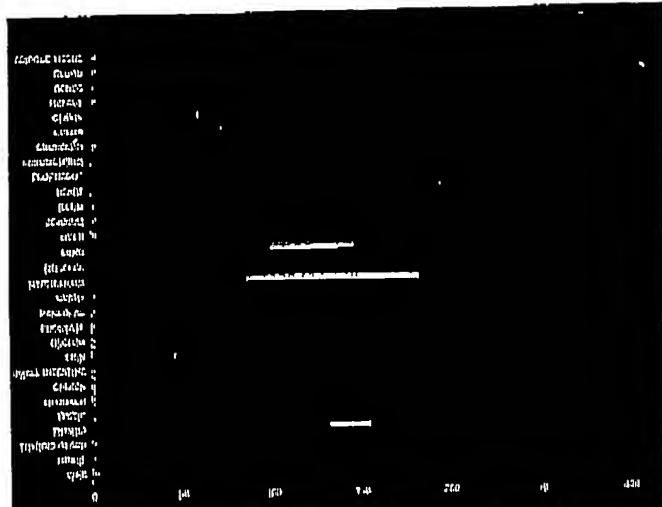
- Two clones isolated
  - Lung library (Origene library)
    - 3.8 kb in length
  - Mast cell library (constructed at GLGC)
    - GeneTrapper technology
    - 4.0 kb insert
- Small open reading frame
  - 408 nucleotides yields a 130 amino acid protein
  - Protein is very hydrophilic
  - No significant homologies to any known proteins or domains

## Expression Profile for AA447527





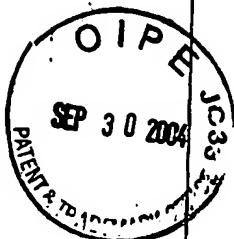
**Electronic Northern for  
AA447527**



AA447527

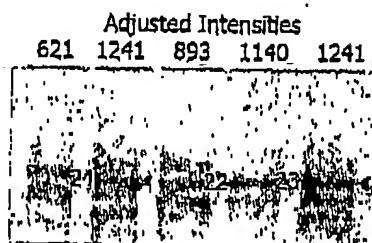


- 1: 3 wk MC
  - 2: 6 wk activated MC 3hr
  - 3: HMC-1 resting, mast cell leukemia cell line
  - 4: KU812, basophilic leukemia cell line
  - 5: MO7e, megakaryocytic leukemia cell line



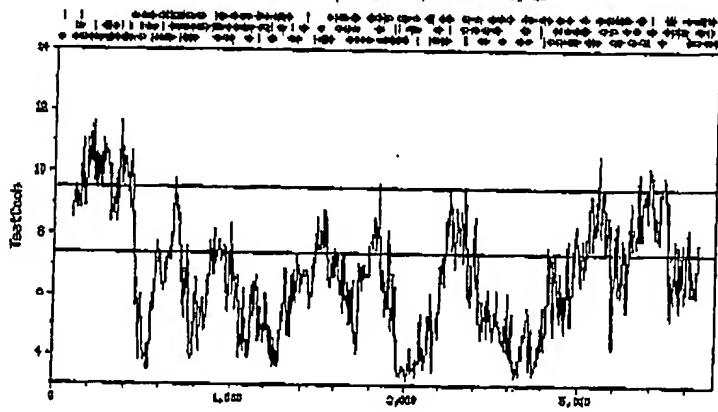
## AA447527

- Found in READSTM with a pattern of 13133
- Enzyme site, BsrG1 found 141 bases from the poly A tail; corresponds well with 200 bp READSTM fragment (primers add 62 bases)



## TestCode Result on AA447527

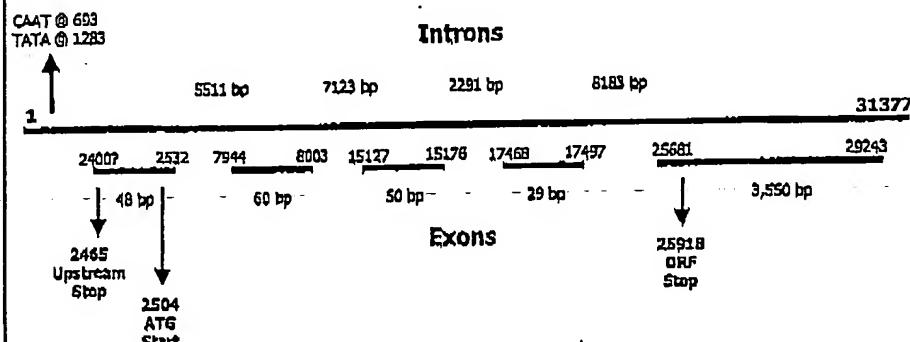
TESTCODE of: AA447527122.xls at 2024, 1 tot: 3764  
Window: 200 bp September 18, 2004 00:18





## AA447527 Gene Organization

### Genomic DNA AC074365



1 to 31377 above corresponds to the single contig,  
78258-109634 from AC074365

## Gene Selection